

THE LEISURE HOUR.

BEHOLD IN THESE WHAT LEISURE HOURS DEMAND,
AMUSEMENT AND TRUE KNOWLEDGE HAND IN HAND.—*Cowper.*



WHAT CAN HAVE MADE HIM SO LATE?

A CHAPTER OF ACCIDENTS.

I.

MR. RAEURN wanted a holiday. For many months he had worked hard in his calling, which was that of a private tutor. Now, in August, all his pupils were out of town, and he seized the opportunity. Where would he go? To Brighton he soon determined; there is no place better for a man whose brain needs rest. It is a great mistake for such

a man to go to any rural retreat. A run to the Continent is a wiser move, but Mr. Raeburn did not feel inclined for travelling at present. At Brighton there is always enough going on to secure healthful diversion to the mind, and the air of the cliff and the downs is always pure and bracing. Besides, he liked to know where he was going to live. In younger days he had been usher in a school at Brighton, and the sister of his old chief had, after her brother's death, taken a house at Preston, part of which she let as lodgings.

He had been down several times from Saturday to Monday, and found himself very comfortable. It was not like being cribbed and confined in two rooms in a strange lodging. He had the run of the house, and Miss Carson was pleased to have a lodger, or parlour-boarder rather, of whom she knew something. So, after interchange of letters, it was arranged that Mr. Raeburn should be domiciled for some weeks at number seven, Vernon Road, Preston.

On arrival, Mr. Raeburn found a change in the household. Helen Norris, an orphan niece, lived with Miss Carson; her presence proved an agreeable surprise. Mr. Raeburn admired her at first sight, and the more he saw of her the more he liked her. She could not be called beautiful, but she was good-looking; and, what is far better, she looked good. She was kind and bright, and she was sensible, which is one of the rarest gifts in a woman. Mr. Raeburn had not lived to be nearly thirty-five without thoughts of marriage, but he had never met with any one for whom he was willing to give up his freedom. An orphan niece probably had nothing, but what of that? she was evidently a good manager, and a pound in a woman is worth fifty, or five thousand, with her. He had saved enough to begin married life without anxiety, and before long had made up his mind to seek the heart and hand of Helen Norris. Whether the young lady had for some time any notion of his purpose is very improbable; her aunt certainly had not; and, indeed, there was a shy reserve which made Miss Carson wonder sometimes if her guest might not be a good deal changed, as he certainly was altered in his manner and ways. Things were in this state when events occurred which have now to be narrated.

It was about ten days after Mr. Raeburn's arrival. Sitting in the parlour talking, after the early dinner, he remarked that the town was very full to-day. Miss Carson raised her slim, white hands with a little gesture of annoyance. "Full; you may well say so! I went part of the way down North Street, and never was so glad to get back in my life. There seemed to me such a rough set of people about."

"It is race time, you know," said Mr. Raeburn.

"Ah, indeed! I was not aware; that accounts for it. I shall not stir out again to-day," announced Miss Carson, with emphasis.

"Pray don't say so, for I was about to ask you to go with me—not to the races," added Mr. Raeburn, laughing at her sudden look of horror, "but for a trip in the little steamer that leaves the pier every hour. The fact of it being race time will be all the better for us, as it will draw the undesirable people in another direction, and you will not be likely to meet them."

But the lady was not to be tempted; she declined to run the risk. Mr. Raeburn, therefore, turned to Miss Norris with no better success.

"If you would like to go, do so," said Miss Carson; "I can manage."

"You are very kind, but if I go out to-night it will, perhaps, be hardly wise."

"You are quite right, my dear; I had forgotten you promised to sit up with old Mrs. Dare. Yes, you will be prudent not to tire yourself beforehand."

"What," said Mr. Raeburn, with interest, "are you about to repeat your experiment in the nursing line? You are a friend in need. But ought they to tax your kindness? cannot they get assistance?"

"No; I know they cannot really afford a nurse, and by any one giving a little help occasionally, the daughter is able to do without. It does not seem much to take Clara's place for a few hours when it enables her to renew her strength with a good rest. You would say so if you could see her untiring devotion to her mother." And here Miss Norris, who had warmed with her subject, blushed slightly.

Mr. Raeburn considerably said no more, and soon rose to get ready to go out, Miss Carson saying, "A pleasant walk to you."

"You should come with me, and so ensure it," said Mr. Raeburn, gallantly. "Good-bye."

Before starting, he popped his head in again to observe, laughingly, "Since neither of you ladies will take pity on me, and keep me out of the way of temptation, I may, perhaps, go on the hill, and have a look at the proceedings there, and be able to tell you when I come home who has won the cup."

Miss Carson shook her head impressively. "Better keep out of bad company," she counselled, smiling. "That is an old woman's advice."

"I will give it every consideration," said he, merrily. And this time he was really gone.

II.

MISS CARSON was busy writing till half-past four. By that time she had completely forgotten Mr. Raeburn and her own warning, which had indeed been tendered more in fun than earnest, for she had a very high opinion of her guest, and often said that in these fast days it would be difficult to find a more sensible and steady young man than he. But, somehow or other, in spite of all her confidence in him, a misgiving came across her mind, much as the first distant mutterings of a storm might come across her ear, when, in taking her place at the tea-table, rather later than usual, she saw his empty chair beside her own.

Miss Carson formed no exception to the general rule. She had faults, and one of them was her tendency to jump to conclusions. So, clearing in a most expeditious manner all the suppositions which might have accounted satisfactorily for his absence, she arrived, with one bound, at a conviction which Miss Norris and Charlotte, her maid, were much too wise to waste breath in combating—namely, that Mr. Raeburn's non-appearance—he being usually the most punctual of men—was connected with "those horrid races." This strong expression was not the result of mere prejudice. Miss Carson might well be excused a little bitterness on that subject. Deep in her heart there was an old wound that yet bled sometimes, cover it as carefully as she would. Far back in her life there was the memory of a sad experience. Her mother's tears, her father's anger, her favourite brother's downward course from betting to gambling, from gambling to dishonesty and ruin. Could she ever forget it? Never, never. Races! ah! what a sermon she could preach on them with her brother's life for a text, that brother who lay in his nameless grave beyond the sea.

Provoked as Miss Carson felt when the evening wore on without any sign of the absentee, she nevertheless bottled up her indignation, till Nellie Norris had started about eight o'clock on her charitable errand. "It would do no good," she mentally argued, "to worry the girl just when she needed her strength." Besides, the very knowledge of her own readiness to distrust, made her hesitate to tamper

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with Nellie's simple faith in her fellows—the simple, childlike faith which veils from some pure hearts the darker side of human nature.

But when Charlotte brought in the supper-tray, the cork was out of the metaphorical bottle, and her anger found vent in a long tirade against the discourtesy, to say the least of it, of her visitor. "I will not delay supper an instant, Charlotte," she exclaimed, wrathfully attacking the cold mutton; "and I shall tell him I really cannot have this sort of thing. He never did it before, and I will not have it begun now. If he cares to make this house his home when in Brighton he is welcome to do so, but he must conform to the rules of the house. Now I suppose he will not come till ten. Billiards, no doubt. Well, perhaps, Charlotte, you had better leave the tray."

Alas! for Miss Carson's reliance on the home-propelling influence of ten o'clock p.m. That hour, suggestive to all well-conducted people of bolts and bars and bed, rang out from a neighbouring steeple, and down the street, where footfalls were growing fewer and silence was gathering. But Mr. Raeburn did not come. The fire was out, and she no longer made a pretence of reading. What could it mean? For a brief five minutes alarm entered her breast to dispute the field with vexation. Was he ill? had he met with an accident? Nonsense! she must have heard of it. Had he not often said he made a point of carrying his address in his pocket? The contest between such fears and her first suspicions was soon over, and Miss Carson had grown more irate than ever when the clock struck eleven; with unnecessary emphasis, she thought, as the strokes echoed, doleful and distinct, along the now deserted thoroughfare, and still he came not.

"Turn off the gas; lock up; go to bed." These commands, issued in a series of sharp jerks like so many volleys from the top of the kitchen stairs, roused Charlotte from the perusal of a thrilling tale in the latest number of the "Penny Dreadful," over which she was wasting her eyesight and her time, and sent her reluctantly upstairs. Miss Carson soon followed, and in the privacy of her own apartment changed her black silk for a scarlet dressing-gown, and laid herself down on the bed, ready to descend when the summons so anxiously expected should come. She had strictly enjoined Charlotte to leave this to her, partly on the score of propriety, partly that she might the better impress the offender with the enormity of his offence; for Miss Carson was a lady who stood very much upon her dignity, and it must be something not far short of an earthquake, or a morning call from the Queen, that would induce her to forget it so far as to answer the door. She therefore rather calculated upon the crushing effect her unlooked-for presence would produce. She lay down, but she could not be said to rest, for every moment she started nervously from her pillow to listen, now to one, now to another, of those mysterious noises which any one who likes to try the experiment may hear at the "witching hour of night," provided the remainder of the household be fast asleep, and the nerves worked up to a proper pitch of excitement. The ghostly creakings, the unearthly rustlings, the indescribable phantoms of sound, so to speak, which may be conjured up at such a time, and under such circumstances, are astonishing.

At five minutes past twelve Miss Carson raised her head for about the fiftieth time, and listened intently.

At last—at last, there was no mistaking the rattle of the gate. She rose.

It is a difficult thing for an elderly lady to look imposing and dignified when minus the usual coiffure, and robed in a dressing-gown that even in its best days was a trifle scanty. Miss Carson felt this too late, missing the accustomed stately rustle of her ample skirts as she went down, her head erect, and her nightcap, which she had intended to throw off, but had quite forgotten at the critical moment, casting strange shadows on the wall. Half-way she paused to place Mr. Raeburn's lighted candle on his table. She could speak to him better to-morrow; he should have no excuse for lingering below to-night.

"He is some time ringing," thought she; and, as if in response, there came a faint tinkle from the bell, immediately followed by a firmer pull and a louder peal. She hastened to the door, drew the bolts, turned the lock, opened it cautiously. Her caution stood her in good stead; for, as the ringer was imprudently leaning against the door, the consequences otherwise might have been serious. As it was, he was precipitated against her, and she recovered her equilibrium to behold her recreant visitor making his way to his bedroom with rapid but very uncertain strides, and a great deal of help from the banisters. In that hasty and horrified glance she not only observed his unsteady gait, she noticed also the extraordinary appearance of his hat, which, battered and stained, rested rakishly on the back of his head; she saw his crumpled necktie and the splashed condition of his coat; and, if she were still inclined to doubt such fleeting evidence, there was his umbrella—his neat silk umbrella—lying at her feet, with one rib sticking helplessly out, and a great rent in the side. In the midst of her anger and grief, Miss Carson retained sufficient presence of mind not to place this disreputable article near the smaller and more virtuous ones in the stand, but put it in the corner of the passage. Then she went upstairs and requested Charlotte to come and sleep with her, just as that damsel was whisking back into her own room from the upper landing, where she had been listening with all her ears, greatly impressed, and, it must be added, not a little amused, at these novel experiences in the quiet household. It may be open to question whether Miss Carson would not have found solitude more enlivening than was the society of the housemaid, who, taking base advantage of the situation, told dismal stories of deeds committed by men, aye, "real gents, too," when "they was a bit on;" and finally made her nervous companion shudder by darkly insinuating that it was a dreadful mistake "a letting of him have a candle."

"Charlotte!" said Miss Carson, in an agony of apprehension, "is the light out?"

"No, mem," said Charlotte, looking through the Venetians at a pale glimmer that streamed across the little back garden from the window below.

"Then, Charlotte, we must not go to bed till it is."

"Very well, mem."

But Charlotte remembered with some dismay that she had supplied Mr. Raeburn's candlestick with a fresh composite that evening; and that if, therefore, he should chance to seek his couch oblivious of his extinguisher, their own prospect of repose was remote. In this, however, Charlotte was agreeably

disappointed. The light soon disappeared. And though Miss Carson still fancied every now and then she detected a smell of burning or a cloud of smoke, she yielded at length to fatigue, and slept profoundly by the side of the snoring Charlotte.

At six o'clock the door bell rang again, this time very quietly. It was Miss Norris returning early from her vigil, that she might snatch an hour or two of rest before the day's duties began.

Charlotte, already dressed, left her mistress still sleeping; and, with a very unusual access of consideration, determined she would say nothing at present to the young lady of the doings of the past night. The girl loved Miss Nellie in her rough way. Miss Norris had been kind to her, as indeed she was to all with whom she came in contact. And Charlotte had an inkling in her mind that Nellie might have reason to regret, even more acutely than Miss Carson, the new and unsuspected phase developed in Mr. Raeburn's character. So she admitted her with some simple remark on the weather, though her self-possession was sorely tried, and her self-denial also, for she was longing to be the first to tell the wondrous tale, when Miss Norris, pointing to some very dirty footmarks disfiguring the white steps, wondered "who had been to the house with such muddy boots."

"Now, if she goes and asks questions, of course I must tell her," thought Charlotte, unconsciously hoping that she would. But Miss Norris asked none; she was tired and sleepy. So Charlotte added aloud, "Will you lie down now, miss? I'll bring you a cup of tea directly. You must be wanting a nap."

And after the tea and some toast, Nellie laid her weary little head peacefully on her pillow, and, happy in the consciousness of having soothed the pillow of another, was soon fast asleep.

PRACTICAL SOCIAL SCIENCE.

BY THE REV. HARRY JONES, M.A.

VI.—DOMESTIC ECONOMY.

THE word "domestic," in the title of this paper, is, strictly, superfluous, for the precise meaning of "economy" is "the management of a household, or family." It is an old word, and made up of two, one signifying "house," or "household," the other "law," or "usage;" and thus, as I have said, the real meaning of the word "economy" is "the management of a household, or house."

This may clear the way towards a better respect for the word than sometimes prevails. It must not be confounded with "parsimony." It may no more be confounded with "parsimony" than "temperance" may with "starvation." It is the due administration of a household, and is exercised equally in the outlay of a thousand pounds and a thousand pence. It has nothing to do with riches or poverty. It is used with equal fitness when applied to the conduct of a kingdom and a kitchen. It indicates no narrowness or meanness. It is the prerogative of the most perfect mind and brain, *i.e.*, when carried out aright. It even concerns the working of the Divine mind, since we speak with truth of the "economy of nature." And yet, though it has these high belongings, it invokes the principle which best enables a poor man to make the ends of his income meet. It involves the secret of financial comfort. It anticipates

and precludes some, at least, of the occasional pinching from which many households suffer. It is superior to and independent of the influence of passing fashion, since it concerns only the proper distribution of ways and means, whatever the end be which is sought to be obtained.

The subject being thus large, I have given the title of "Domestic Economy" to the paper, since I wish to confine my remarks chiefly to the management of a household, and the application of an income, especially a small one. We sometimes see a family with narrow means living in comfort and happiness, while another, better endowed, and yet committed to no larger inevitable outlay, is always in money difficulties and discontented. It is customary, indeed, to say that these financial domestic failures arise from bad management. A clever or good manager will make those ends meet which another, with any amount of fussiness and effort, never contrives to bring together. But sometimes the admission of this truism is unaccompanied by any clear perception of what constitutes good management. Let me therefore try to contribute a drop to the stream of Practical Social Science, by drawing my readers' attention to a few points in which good economy is departed from or unseen.

Much may be said for the keeping up of the social position in which a family finds itself, but there is with many an almost unconscious, hardly admitted, disposition to push its pretensions just beyond that limit which the means of the household allow. There are small increments of display or procedure which seem, and are, individually inconsiderable, but which, when added up, put a distressing strain upon the financial resources of a family. As it is the last straw which breaks the camel's back, so some slight effort to present an improved appearance makes all the difference between ease and discomfort. The difference of an inch in the situation of a button makes the waistcoat irksome. When the shoe is half a size too small the foot is pinched. The delay of a minute may involve the missing of a train. And thus it is the neglect to allow a margin, however narrow, which determines the comfort of many a household, and puts the balance between income and expenditure on the wrong side. It is hard to say exactly what puts this wrong. In looking over the accounts the several items appear insignificant, and it is difficult to distinguish the offender. There might, indeed, be a very useful employment of a spare half-hour in picking out and adding together the little sums which stand against those things which, as a man pauses at each, he admits he might have done fairly well without. Let him so treat the outlay of a whole year. These odd sixpences and shillings and pence have a trick of creeping up into a very appreciable total representing a welcome sum, for which there is really nothing to show.

Beside these minute details of expenditure representing small useless outlays, account should be taken of the differences between, say, not merely the cost of walking or riding, but the cost of travelling first, second, or third class—between omnibus and cab, between water and wine. The result of such a calculation would add to the total got by extracting and adding up the outlays which were wholly needless. I believe that there are many people of small means, worried by "impecuniosity," who have never made such a calculation. Perhaps they have sometimes had a short fit of reflection, but on glancing

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back on the principal causes of their embarrassment, they have disdainfully refused to believe that those gloves and that cab could have made the difference, much less that ridiculous entry of amounts for "sundries" that they have so scrupulously put down. Indeed, maybe they see some assurance of economy in the fact that they "keep their account" to a penny. What is the use of this except to learn how the six-pences and pennies go? Small outlays none the less clip down available income because they are entered in a book. Add them up. Go back over some considerable time, and then ask whether the resulting total would not be a very agreeable sum to possess. Frequently it would make all the difference between financial ease and discomfort. I am thinking of people who wear gloves, use occasional cabs, buy a paper from the window of a railway-carriage, and make little of taking a hurried lunch at the counter of a chop-house or tavern, though its cost may seriously impair the symmetry of a shilling. Do they realise the fact that nineteen pence three farthings a day is more than thirty pounds a year? Passing by them, look at the case of the more needy man who daily takes only one glass of beer. He will thus, in the course of twelve months, have paid away something more than three pounds over the bar. I only say that at any time—especially, perhaps, at Christmas—three bright sovereigns would look very well in the palm of the hand.

It may be a little straining of economical utterance to say that a penny saved is a penny gained, but there can be no doubt that small, unregarded items of expenditure, seemingly trifling outlays, which at the moment bring with them no sense of extravagance, determine the depressed condition of many "respectable" families which are plagued with the constant ache of genteel poverty, and never see the ends of income and expenditure fairly joined. There are people who, if they could only have the moral courage to accept the fact of small means, cut off their little trimmings of display, wear stouter, more lasting shoes, clip the artificial flowers from the bonnet, retain divers twopences and threepences spent in saving themselves the trouble of a walk, and eat simpler, homelier food, would find that they could enjoy life as they have never done before. I do not dwell upon that phase of waste which is displayed by intemperance in drink. That directly makes rags and wretchedness, and hardly comes within the scope of a paper which speaks of domestic economy. But, perhaps, there are poor people who hardly notice the enormous sums which are laid out by their class in liquor. I am rather thinking of avoidable expenditure among "decent" people who are always embarrassed. A diligent searching for and stopping of minute financial leaks would generally set them free from that worry of straitened means which now spoils the comfort of many a household.

If we looked higher in the scale, we should find the same process still more plainly and immediately operative. I refer to those who take small count of the loose silver change in their pockets, who keep more than one servant, put wine upon their table at dinner, give their "parties," and affect a small air of fashion. Their petty extravagance is often most disastrous. Though the income of the master may amount to some hundreds a year, they are always, more or less, plagued with debt, and this plague almost invariably comes from their effort to keep up "appearances," for which they are respected by

none of their acquaintance, but which they have not the courage to discard. They are laughed at behind their backs, as well as pinched at home.

There is, moreover, one phase of extravagance which disguises itself under the name of economy. I mean that which appears in the purchase of an article because it is "so cheap." Those "clearance sales" which tempt the passer-by to look into the ticketed shop window provoke some of the dearest purchases that can be made. They suggest more wants than they supply. It may sound economical to have bought something which the purchaser desired, at half-price. Had the whole price been asked he would probably have refrained from buying, and thus kept his money in his pocket. No doubt the really economical housewife who puts off the purchase of, say, some necessary garments till she comes across a genuine cheap sale profits by her delay. But very many buy from sheer inability to let a "good bargain" alone. Such a bargain is good when the article is imperatively needed, but in any other case it only represents so much money lost. It is far cheaper to do without a thing we don't really require than to get it at half or a quarter of its value.

Auctions are sometimes curiously provocative of expenditure. I remember one in the country, at which a large, old-fashioned, lumbering chariot was put up for sale. Nobody wanted the thing. It was really useless. "Five pounds," said a very small farmer, as the auctioneer looked round for a bid and caught his eye. I shall not soon forget his dismay when the great yellow vehicle was knocked down to him. The "cheap" rubbish people will sometimes gleefully bring home from an auction is apt to give rise to much vexation when the goods are coolly inspected. I recollect once buying a couple of pictures at a sale. I didn't want them, they were poor things, but they seemed so ridiculously cheap that in an idle moment I nodded to the seller to find myself the owner of two "views," which have haunted me ever since. I didn't like to burn them; they seemed so worthless that I could not give them away, and now they shed an air of meanness in some bedroom in the house. I would recommend every one who would practise domestic economy to beware of superfluous "bargains." Buy what you must buy, but ask yourself whether there is any legitimate "must" in the matter.

Sydney Smith puts the matter well when he says, "If you want to make the most of a small income, and have a thought of buying anything, always ask yourself these two questions: 'Do I really want it?' 'Can I do without it?'" These two questions, answered honestly, will double your fortune."

It is surprising with how little an equipment a man can do without being anywise miserly. Did you ever, my reader, give away an old hat? What marvellous recovery of juvenescence it exhibited on the head of the new owner. Sometimes things seem worn out to us merely because we have used and known them long. Much of the second-hand furniture one sees in shops looks better than the new. I dare say some of it was disposed of by its owners merely from the contempt of familiarity, and a vague notion that the room must be refurnished. People often replace things which might easily enough be repaired. Even repair itself may involve needless expenditure. Under the plea that a stitch in time saves nine many pounds are wasted. I don't mean that the real frac-

ture should not be mended before it grows worse, but some people are always laying out money before they need. The thing they have "done up" would have served for a long time as it was. It looked, perhaps, rather shabby sometimes, but it was strong and serviceable enough. And the five pounds saved in furbishing it up one year would have been five pounds to the good in the next. You may be too quick in pouncing upon every sign of wear and tear in your surroundings, and insisting on its rectification "before it can go any further." It is surprising how long a thing will endure wear and tear if you only use it fairly. Things sometimes get crooked in reaching their bearings, but their bearings once reached, they last with admirable tenacity. Depend upon it there is much sham economy in meddling with matters under the notion that decay should be always anticipated.

The consideration of our subject obviously presents so many aspects that I can touch on only a few. On the whole, with regard to domestic financial administration, there is store of wisdom in the old saying, that if we look after the pence the pounds will look after themselves, although the wisdom of our ancestors is committed to the sentence that a man may be

penny wise and pound foolish. This, however, refers rather to the whims than to the extravagance of expenditure.

There is one other point of which I must speak before I have done. The closeness of the income to the outlay in many a poor man's family where economy is practised forbids the laying by of any appreciable capital against a season of sickness or the decay of old age. He may resolutely live within his means, but the margin of saving is so small that even a short time of helplessness swallows it up. Thus he, above all others, should belong to a sound club. There is no more plain and pressing kind of economy than this. An illness thus unprovided for deranges the best management. Just when most money is needed, least comes in. Let him belong to a good club, and that keen worry of sickness caused by the consciousness that "nothing is coming in" is obviated, and when he gets about again there are no accumulated scores to be paid off. Thus he shares in the wise economy of a civilised people which enables contingencies to be provided against, and exhibits one of the best phases of thrift in his own household and person.

WINCHESTER COLLEGE.



THE OLD SCHOOL ROOM, WINCHESTER COLLEGE.

IN the nave of Winchester Cathedral, beneath the superb Gothic canopy which he himself caused to be built, and which, probably, his own ingenuity

devised, rest the remains of William of Wykeham. Surrounding this venerated shrine as with a halo of rare brilliancy are memories which form some of

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the brightest pages of English history. If we examine the record of Edward the Third's reign, adorned as it is by so many splendid achievements, and rendered glorious by the birth of our first great poet, and by the labours of the first translator of the Bible into the English language, we find no worthier name on the roll of the great men of that time than William of Wykeham's. The son of a simple yeoman in a Hampshire village, heir neither to rank nor wealth, he rose to occupy the foremost positions in Church and State by dint of his own innate talents, his remarkable energy, his unswerving integrity, and his unwearying perseverance in well-doing. His career was the exemplification of that now famous aphorism which he selected to grace the scroll at the foot of his escutcheon, the modest heraldic device of both his colleges, "Manners makyth man." The estimation of a man in this life he held to depend on moral worth; and for his conduct, and not the accidental advantages of fortune or birth, should he be regarded. Wykeham's moral worth advanced him to the right hand in the counsels of the king, his sovereign; his singularly unselfish character and upright demeanour as a servant of the Church were the means of promoting him to episcopal dignity. The effigy in his beautiful chantry perpetuates his fame as Bishop of Winchester and Knight of the Most Noble Order of the Garter, and the inscription on his tomb bespeaks his virtues as a man unbounded in hospitality to rich and poor alike, as an able politician and counsellor of the State, and as the founder of two of the most ancient seminaries in England—New College, in Oxford, and the College of St. Mary of Winchester.

At the period when our Universities were at their utmost decadence, when incessant wars had compelled many students to exchange the scholar's gown for the soldier's mail, and the fearful scourge known as the Black Death had driven the rest from the seats of learning, William of Wykeham came forward with his idea for a "new college" at Oxford. The original condition of that University, as well as Cambridge, in regard to all the conveniences of teaching and residence, appears to have been humble in the extreme. Great discredit and scandals arose because of the absence of anything like collegiate discipline. The scholars were scattered abroad through the town, and each went his own way, living where he pleased, and generally how he pleased, and without the smallest deference to University authority. Students, we are told, were sometimes banished for thieving, poaching, and other enormities. Degrees were openly offered for sale, exhibitions were kept back from poor scholars, who, in lieu, obtained licences, under seal of the Chancellor, permitting them to beg with scrip and wallet, singing, "Salve Regina" at rich men's doors. Discipline was at its worst, the University lecture-rooms being crowded by unruly young men, "mere varlets, who pretended to be scholars," when the Bishop of Winchester set about confirming and establishing the collegiate system in England. Wykeham was at this time about fifty-five years of age, and therefore in the prime of his powers, in full favour of the king, with ample means and large mind devoted to the reform of education. Of halls, simple hostels, or open hotels for students to reside in, there were already many in Oxford, but there was no place where students were lodged under the immediate control and surveillance of tutors. Wykeham founded

New College in the year 1379, subsequently endowing it, and appointing Warden, Fellows, and other officers to supervise the moral well-being and instruction of the scholars who might thereafter be sent there. The good bishop intended that his newly-founded college should serve not only as an example to be imitated by future benefactors to the University itself, but that it should be the initiatory step towards perfecting a scheme which he had long pondered, and which he devoutly hoped might be more generally applied in the furtherance of education in England. It was not sufficient, he felt, that students should be provided with a properly-constituted college wherein to assemble for University teaching, they should be trained beforehand so as to reap all the advantages of the higher instruction afforded by the University directly they set foot within its limits.

Accordingly William of Wykeham next directed his attention to founding a school. Once a poor boy himself, dependent on his personal exertions for his maintenance, he resolved that the school which he intended to found in the cathedral city of his diocese to train young scholars for New College should be mainly for poor boys also. Outside the King's Gate, which still supports the royal arms of England, and hard by the minster walls of St. Swithin, on the site of an ancient grammar school, Wykeham laid the foundations of his smaller seminary at Winchester. On March 26th, 1387, the first stone was laid. Six years later the buildings were completed. The statutes for the governance of the school he drew up with his own hand, dedicating it for ever "to the Honour and Glory of God and of the Most Blessed Virgin Mary," by the name of the St. Mary College of Winchester. On the morning of the 24th of March, 1393, a solemn procession entered the cathedral precincts, and passing through the King's Gate presently came to the college quadrangle, where, with due formalities, William of Wykeham presented the title-deeds of the foundation to the chief personage in the procession. This was Thomas de Cranleigh, appointed by the founder first Warden. With him were ten Fellows—the Warden and Fellows are said to have represented the eleven Apostles (Judas omitted). Then came the head and second Masters and seventy scholars, representing the seventy-two Disciples. After these walked three Chaplains and three Clerks, representative of the six faithful Deacons. And bringing up the rear were sixteen Choristers, emblematic of the four great and twelve minor Prophets. On this wise was the first establishment of Wykeham's College at Winchester constituted, and so it remained for a period of more than four centuries. Within that great space of time the college has so grown in fame and wealth, and the competition to enter its gates has become so immense, that it has been found necessary to bring its foundation benefits within reach of a greater number of "scholars" than Wykeham's statutes originally contemplated. Under recent legislation the number of "scholars" is increased to one hundred, with an adjunct of twenty exhibitioners. The limitation of Fellowships to six has in a measure provided the additional revenue necessary to support these latter.

The original qualifications, preferences, and restrictions for "scholars" were substantially the same as at Eton, to which, as we have seen in a previous paper, the Winchester regulations were transferred. Wykeham was sufficiently alive to the interests of his

new foundation as to accord permission, in the statutes which he framed, for the admission of a limited number of boys, "sons of nobles and great men," to partake of the educational advantages of his school. They were not to exceed ten in number, and were to be entitled to receive the like instruction as the scholars received; but they were to be boarded without charge to the foundation. Such boys were in course of time received into the school, and paid only for their "commons," or board. Hence the present division of Winchester boys into two distinct classes, "Scholars," or boys on the Foundation, "Commoners," or boys not on the Foundation. It may

of 485 years William of Wykeham's sons have been lodged during their school training for the University. Let us pass within one of these venerable dormitories, and note what manner of lodging Wykeham devised for his children. Homely, in truth, and not too liberal of comfort! The chambers of more modern schools, with their cosy "cubicles" and studies, are palatial in comparison with these humble sleeping-places, the interiors of which take us back to the period of the fourteenth century. The occupants live, as it were, in common. Eight small iron bedsteads are ranged against the four sides of the chamber, with curious little receptacles, half cup-



WINCHESTER COLLEGE.

be interesting to mention that of the latter class there are now 285 in the school—a considerable and satisfactory encroachment on the diminutive number appointed by Wykeham.

No visitor to the picturesque city of Winchester ever leaves it without strolling through the ancient college which constitutes one of its main attractions. In the Inner Quadrangle, or Chamber Court, we have the only remaining perfect example of Wykeham's original buildings. In this very court, after solemn prayer and thanksgiving to Almighty God that he had been enabled to fulfil the noble purpose of his life, the bishop handed the school statutes to Thomas de Cranlegh, the Warden, and addressed in kindly words of congratulation, advice, and sympathy the original seventy poor scholars who had come to take possession of the quaint little chambers enclosing it. In these very chambers, six in number, for the space

board, half writing-table, called "Toys," standing between each. In the centre is an oaken pillar which lends support to the low roof, and around this pillar, at a somewhat primitive washstand holding eight basins and as many water-jugs, the scholars perform their daily ablutions; but a sorry exchange after all for the more spacious, if too airy, washing-conduit of by-gone days. Above this lavatory is a small and rough square book-case, which contains the chamber library of some one hundred volumes. The four sides of this book-case are surmounted with the following apposite inscriptions, whether relics of Wykeham's time or not we are unable to say:—"Them that are meek shall He guide in judgment;" "Such as are gentle, them shall He learn His way;" "Manners makyth man;" and in the Greek "ΑΠΧΗ ΑΝΑΡΑ ΔΕΙΞΕΙ." A rude open fireplace, in which during winter days the time-honoured

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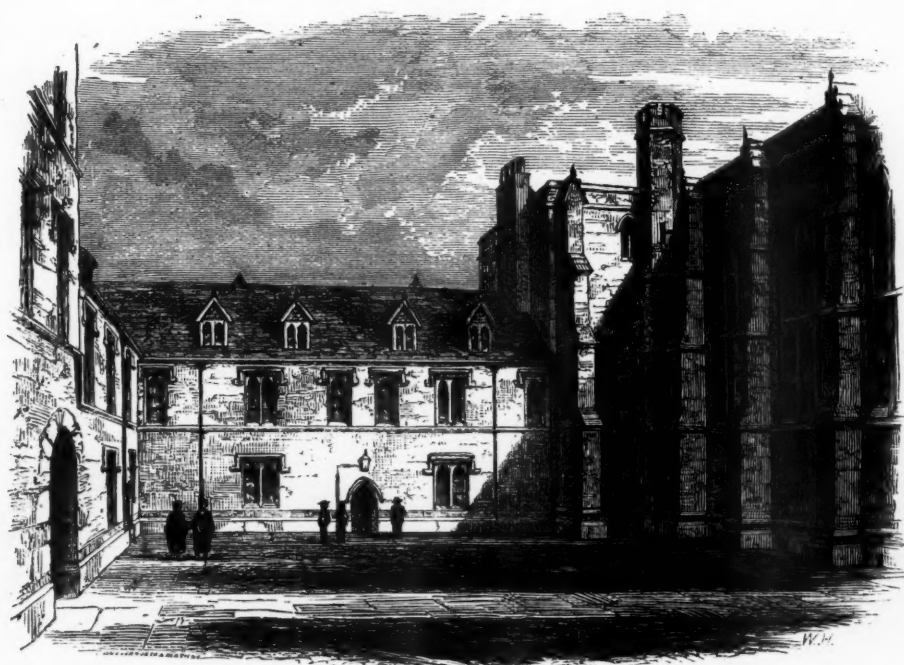
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Winchester "faggot" cheerfully burns, completes the category of those features of a Winchester scholar's chamber which chiefly claim our notice. From this Winchester faggot, by the way, a most cherished relic of the founder's time, we fancy we may trace the origin of the word "fag." At Winchester it is the duty of the lower twenty "scholars" to perform the ordinary schoolboy service of fagging, and the principal duty in connection with that service is to bear the "half-faggots" (to be precise) to the fireplace and light the morning's fire.

Winchester undoubtedly produced the earliest type of the monitorial system now so generally recognised at our great schools. The beginning of that system may be traced to Wykeham's statutes, which provide

is virtually head of the school, governor of the school, among the boys; "Præfect of School," who claims jurisdiction in scholastic matters outside the province of the masters; "Præfect of Library," who acts as School Librarian; and two "Præfects of Chapel." There are also twelve "Commoner" Præfects, but these have no power among the collegers, or, more properly speaking "scholars." The Præfects have various advantages and indulgences attached to their office, and are invested with the power of "fagging." It is proper to observe that fagging at Winchester is now restricted to the not very onerous or responsible service of faggot-laying, coffee-boiling, and preparing the morning bath. "Tunding" has been abolished. It is unnecessary to remark upon this Winchester custom,



CHAMBER COURT

that in each of the chambers there shall be selected "three scholars of good character, more advanced than the rest in age, discretion, and knowledge, who may superintend their chamber-fellows in their studies, and oversee them diligently, and may from time to time certify and inform the Warden, Sub-Warden, and Head-master respecting their behaviour, conversation, and progress in study." There are six chambers, as we have stated, and consequently there are eighteen of these monitors, known at Winchester College by the more imposing title of "Præfects." Duties are assigned to each, and all are invested with authority by the Warden himself in a traditional and appropriate form of words. Eight Præfects have power in the Inner Quadrangle, practically only in "chambers," the remaining ten have power everywhere. Five of the ten, called Officers, are invested with special authority, and in one case, at least, receive remuneration for the services performed. These five are as follows:—"Præfect of Hall," who

seeing that it attracted very general attention some years ago in a discussion in the daily press.

In the College Hall, than which few finer examples of a college dining-room exist in England, we obtain a further glimpse of the old school-life of Wykeham's time. The same long oaken tables, ranged on either side, with low forms as seats for the scholars, are in use now as belonged to his day. At the upper end is a dais or "high-table," where, on particular occasions, sit the Warden and Fellows, and at which the Wykehamical grace is usually sung by the scholars after dinner. At the lower end still stands the ancient and massive iron-bound "tub," into which were cast the fragments of the daily meal, afterwards to be distributed at the door to poor alms people. This venerable and praiseworthy custom of monastic times still continues to be daily observed in the hall of Winchester College. On either side of the "tub" are the butteries, curious little cell-like places, from which the provisions are dispensed, and

where we may yet handle the square wooden trenchers and the capacious leathern jacks which constituted the principal furniture of a Wykehamist dinner-table four centuries ago. The "sines" of bread we may taste of, and the more appetising "dispars" of meat; but happily the hungry and exciting scramble on the tables of "hall" for these necessary daily rations has long since ceased. The word "sines," the scholar's allowance of bread for breakfast and supper, and "dispar," his portion of meat, have their origin in a Winchester College custom which prevailed in the last century. There being neither "hatch" nor "roll-call" at the

table by the Choristers of the Foundation in turn. These choristers, called "Queristers" by Winchester boys, are poor boys of a lower rank of life, and are selected from a different class. They perform daily service in the choir of the College Chapel, and in return for this duty receive free board and lodging outside the college walls, as well as a good commercial education, and afterwards are apprenticed to any trade they may select, with the approbation of the Warden.

In the rear of the ancient and beautiful chapel, verging on the College Meads, and in fit association with the most sacred relic of Bishop Wykeham's



DORMITORY, NO. 5.

(From Original Sketch by Stanilana.)

college hall in those days, the provision for breakfast was laid out on a table and the stronger took the lion's share and left the weaker "sines." So again at dinner, the double plate of meat fell to the former as a matter of might, and the unequal moiety, the "dispar," became the portion of the weaker junior. Now each scholar has his proper share of sweet and well-baked bread, and his due proportion of hot and well-roasted joints of meat; but, curiously enough, a custom which has been abolished at Eton—be it remarked with much thanksgiving on the part of the Eton King's Scholars—still obtains, only in a minor degree, at Winchester. The Winchester scholars are served with mutton for their principal daily meal on five days out of the seven. And, as we ascertained from a Præfect, much to their enjoyment. In Hall, the "scholars" (it should be mentioned that these alone board in college) are waited upon at

original buildings, the Chantry Chapel, stands the old Schoolroom. This structure has no claim to the honour of being of the founder's time, but its traditions are more than two centuries old, and it abounds with pleasant memories, very fondly cherished by old Wykehamists. Above the entrance stands the statue of the founder, arrayed in a bishop's robes, with mitre and pastoral staff, cast, so says the inscription beneath it, and presented to the college by Cibber, whose son was a scholar on the foundation. Here, once more, we find ourselves carried back to the period of the fourteenth century, not in studying the interior of the structure itself, but in reading the curious inscriptions written upon its walls. Upon the western wall, for instance, with appropriate emblems—firstly, a mitre and crozier, as the expected rewards of learning; secondly, an inkhorn and sword, the emblems of the civil and military

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professions; thirdly, a scourge—are painted the quaint monitions in Latin, "Aut Disce," "Aut Discede," "Manet sors tertia cædi." In other words, the scholars are warned, "Either learn"—"Or depart hence"—"Or remain and be chastised." At the east end are placed rules for the conduct of the students written in Latin, in the style of the famous Duodecim Tabulæ of the Romans. We regret that we can find no space for a translation of these quaint edicts of the founder. The schoolroom still retains its time-honoured forms with the wide wooden boxes, known as "scobs," for the scholars' books. The chairs, stiff-backed and capacious, yet stand where they were wont to stand when "informator" and "ostiarius," head-master and usher (the only masters recognised under the statutes of Wykeham), came into school to teach all the scholars indiscriminately. And a Præfect, well-versed in the traditions of his *alma mater*, will yet point with somewhat of pride to the spot where stood the famous "Vimen Quadrifidum," or Winchester rod, designed by a Warden of the fifteenth century. Dr. Moberly, the present Bishop of Salisbury, one-time Head-master of Winchester College, told the Public Schools' Commissioners that he doubted whether this same instrument of punishment was as well adapted to its purpose as a birch-rod; but that "it was held sacred by the traditions of the school." The present generation of Wykehamists would have rebelled against any change, either in the manner or the method of their floggings.

To sum up very briefly the impressions we received from a visit recently made to Winchester College, we have come to the conclusion that good William of Wykeham's foundation retains, almost more than any other great foundation school in England, the leading characteristics of its founder's design. It seemed to us that its scholars were given more to work than to play, were more sober and sedate than the boys of other great schools we have visited; but, withal,

were self-reliant, and manly, and modest, and, let us add, that they possessed in a very marked degree all the true inherent qualities of young English gentlemen. They can hold their own in athletic exercises (without which, as a set-off to the more important scholastic offices, no English school is worthy of the name of school) with their compeers of Eton, Rugby, and Harrow; and they more than hold their own with the scholars of these or any other great schools in the great public competitions. Being anxious to learn something of the system of special preparation for the Indian Civil Service, we inquired the other day of the best-known authority on this subject, What school sent up the most thoroughly prepared competitors? Promptly we received the reply, "Winchester." And we can readily believe it. The Winchester School system is an honest system. It encourages boys to do their best, and to study. The only passport to promotion from form to form—from "Junior Part" to "Middle Part," from "Middle Part" to "Senior," and so to "Sixth Book"—is by merit. There is no shirking, no "fudging," as the boys of Christ's Hospital would say; a Winchester College student must rely upon marks, and marks alone, week by week apportioned for work fairly and honestly done, to settle his position in school. No marks, no promotion, is the rule; and thus in time the earnest scholar reaches the top of the tree, and by-and-by the sacred goal of his youthful ambition, New College, Oxford. There are many elements in the school-life at Winchester which deserve more extended and thoughtful consideration than it is in our power to give in a brief paper of this description. We can only end what few remarks we have been permitted to make on this most interesting and important subject by saying that that parent may well count himself fortunate whose son earns the proud distinction of being admitted a Foundation Scholar of William of Wykeham's famous Saint Mary College of Winchester.



KING'S GATE.

THE COMMISSARIAT OF THE BRIGHTON AQUARIUM.

THERE are now many aquariums, but that at Brighton, which was one of the earliest, is still one of the best. It would not be possible to give an absolutely correct estimate of the numbers of specimens exhibited there, for taking the census of so essentially a floating population is a very difficult proceeding. At a rough calculation it may, however, be stated that about 15,000 animals are now held captive in the building. This number may at first sight appear to be exaggerated, but it must be remembered that all the tanks are unusually spacious, while some are of such enormous dimensions that a hundred fishes make scarcely any show. One tank, 110 feet long and 40 feet wide, holds 110,000 gallons of sea-water, and is capable of accommodating two or three porpoises with ease, in addition to its ordinary contents of 40 toppers, 20 dog-fishes, monster skate, rays, and sturgeon.

The vertebrates amount in the aggregate to over 6,000, including mammals from California, Canada, and the Arctic Seas, British diving birds, others belonging to the order *insessores* or perchers, and reptiles from Mexico, Africa, and South America. The fresh-water fishes mount up to 300, of which the majority are British, and a few natives of the Russian, Chinese, African, and South American rivers. The marine tanks contain over 5,000 fishes, chiefly from the shores of Britain and the Channel Islands, and including shoals of herring, mackerel, and of the lively three-spined sticklebacks, this hardy little species of nest-builders flourishing equally in salt or fresh water. The invertebrates number 9,000, and comprise 100 crustaceans (crabs, lobsters, cray-fish, etc.), 5,000 anemones, and 4,500 mollusks—viz. octopods, cuttles, 250 whelks, and between 3,000 and 4,000 oysters. These last are exceedingly useful, and are distributed in such abundance in most of the salt-water tanks, on account of the cleansing influence they exert on the water, by absorbing all organic impurities, thus rendering the turbid waters clear. The mussels serve the same purpose, but falling an easy prey to the cray-fish, and some others of the shell-eating species, become quickly reduced in numbers. They are placed in the tanks a bushel at a time, and, like the hermit-crabs, the beautiful errant, and tubiculous annelides, sponges, and transparent sea-squirrels, are positively innumerable.

Now, with the exception of the bivalve mollusca, which derive their nutriment solely from the water, the whole of the remaining animals need to be provided with the varied food best suited to their specific requirements. We purpose giving an account of the organization of the supply department, obviously a complicated and most important matter, on which the health and liveliness of the inmates of the tanks almost entirely depends.

The largest item in the commissariat returns is that for dead fish, which is supplied fresh by contract daily from Billingsgate Market. More than sixteen tons are consumed annually, mainly by the mammals and reptiles. The family of sea-lions (*Otaria Stelleri*?) dispose of about 50 lb. a day, 350 lb. in a week, or 8 tons in a year. They are fed four times a day, either on whiting, plaice, haddock, herring, or

mackerel, the two latter being their favourite food. The fish is most carefully cleansed and prepared, the plaice filleted, the heads and collar-bones of the haddock removed, and the herring and mackerel thoroughly searched lest a hidden hook should prove fatal. The food is swallowed at one gulp, disappearing so rapidly down their muscular throats that one would imagine they could not taste it, but "Madame" is excessively dainty, and evidently discerns, both by sight and smell, the nature of the food provided, disdaining plaice and haddock, and refusing even to attempt to catch a portion of either in her mouth until she is quite sure that the supply of that which she prefers is entirely exhausted. Her consort is troubled with a larger appetite, and is somewhat less particular. They are occasionally treated with a bushel of sprats at a meal, which are very quickly demolished, and it is amusing to see them diligently searching the pond lest by chance one should have been forgotten. These exceedingly handsome animals were brought from California, and have now been on exhibition for nearly three years. They have much increased in size since their arrival. "Jack" is 10 feet long and weighs 14 hundredweight. In May, 1877, the lioness gave birth to a cub, the first of its species ever born in captivity. A second, a female, was born in March last, but unfortunately did not survive. The young sea-lion is now nearly as large as his mother. When quite young she prevented his taking to the water, and brought him to land in her mouth on one occasion when he accidentally fell into the pond. The parent animals are in splendid condition, and are very intelligent and docile. Their performances at feeding-time are highly diverting, for they are remarkably well trained, and take food from the hands of their keeper or plunge after it into the water. The cub ate his first fish when two months old.

The three seals (*Phoca vitulina*) are fed four times a day, consuming about 20 lb. They are also epicurean animals, preferring herring and mackerel to plaice, and refusing their morning meal if it be not perfectly fresh.

Specimens of the porpoise (*Phocena communis*) were first exhibited alive for any lengthened period in the large tank in this aquarium. They are, however, not permanent inhabitants of the tanks. Sometimes there are two or three specimens on exhibition, and at others not a single representative of the genus on view for months, a fact that is owing to their not being regular frequenters of the coast, as they follow in the wake of the shoals of fishes forming their favourite food. This interesting little mammal has occasionally been caught off Brighton, close in shore, when in pursuit of shoals of herring or mackerel, a fortunate circumstance for the aquarium authorities, as they are quickly removed into their tank, and are more lively than those brought a long journey by road or rail from Rye Harbour. They soon become domesticated in captivity, obeying their keeper's whistle and even taking food from his hand. They are expensive, though welcome guests, requiring a daily ration of 48 herrings or 30 mackerel per head at their four meals. One specimen lived

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nine months. They are always in motion, and are very lively and sportive, delighting apparently in teasing one another and their associates in the tank. They so tormented a slow-going sturgeon, chasing him each time they passed by in their restless career, that it was found necessary to remove him to more tranquil quarters, lest he should suffer in health from their playful attentions.

"Bob," the Canadian bear, omnivorous like the rest of his race, subsists on biscuits, buns, sugar, fruit, and milk, mainly the contributions of the visitors. He also does a little fishing on his own account in the store tanks in the naturalist's room, catching crabs very dexterously and killing them with a stroke of his paw.

The graceful movements of the diving-birds belonging to the guillemot family are seen to unusual advantage under water at feeding-time. The species exhibited belong to the common, or foolish guillemots (*Uria troile*) abounding on the northern coasts of Scotland. They are truly marine birds, only resorting to the land in the breeding season, to hatch their solitary egg on a high rock on the bare ground. The parent birds feed the young ones with fish for five or six weeks, and then carry them on their backs to the sea, where they dive and swim fearlessly in the ocean long before they are able to fly. They are great consumers of fish, and are fed three times a day in the aquarium, their ordinary rations consisting of about one pound each per diem of herring or mackerel, which is cut up into small pieces and thrown into the tank. It is a very pretty sight to watch them flying swiftly through the water, using their wings as though beating the air. They are able to remain below the surface for two or three minutes at a time, deftly picking up one morsel of fish after another, and disputing possession with the cod sharing their abode. Unlike the majority of divers, they swallow their food under water instead of bringing it up to the surface. Whitebait, live sprats, and sand-smelts are occasionally served them as a rare dainty when a great catch is made off Brighton.

The heron dines daily at twelve, disposing of six pounds per week, either of herring, sprats, mackerel, roach, dace, or eels, the latter being evidently preferred. He takes his fish out of the water, catching it upright in his bill, and swallowing a whole herring or mackerel at a gulp.

The reptiles feast every other day at four. The alligators (*Alligator Mississipensis*) and crocodile (*Crocodilus frontatus*) consume forty pounds of whiting, haddock, or herring weekly, fresh-water trout, rats, and horseflesh being equally acceptable. Their appetites are, however, rather irregular, and they will sometimes fast for weeks, one indeed refusing food for three months. They snap their food in a somewhat ungracious fashion, and give vent to a disagreeable hissing noise when annoyed, but they are sufficiently tamed to come to the open grating when called, taking fish from the hand and obviously recognising their keeper's voice. The larger specimen, nearly ten feet long, must certainly find his way entirely by sound, as he is unfortunately blind.

About 400 of the common shore-crabs (*Carcinus maenas*), so abundant on our coasts, are used every week. They are locally called "Havel," and are obtained from rock pools, and are also left on sandy shores by the receding tide, being able to exist for some time out of water. These require to be fed on chopped fish when placed in the store tanks, as it is

necessary to supply them alive to the octopods, who dine three times a week. When thrown into the tank the crabs are quickly clutched in the arms of the octopus, and are enfolded within the umbrella or connecting membrane at their source. They are rapidly hidden from view and brought within reach of the horny parrot-like mandibles, which soon crash through the shell. The octopus will carry his larder about with him, grasping several crabs at once, and carrying them off to his rocky den for future leisurely consumption. It is believed that these formidable foes of mollusks, crustaceans, and fishes enjoy but a brief existence. The British species, at any rate, are annual in their growth, dying when adult in the spring of each year. Nearly 20,000 shore-crabs are furnished annually; they are supplied, as an additional dainty, to the cod, wrasse, and any other of the shell-feeding fishes which happen to be inmates of the tanks.

All the remaining fish-eaters are fed regularly twice a week. Chopped fish is given to the lobsters, cray-fish, edible crabs, gurnards, bass, bream, etc., and finely-scraped portions to the sticklebacks. The cod, toppers, and congers dispose of the coarser portions unsuited for the sea-lions and seals; a bucketful of heads and remnants is thrown to them at a time, a diet which evidently agrees with the congers, for they are exceedingly fine specimens, measuring six feet in length, with a maximum girth of at least thirty inches. They are the oldest inhabitants of the aquarium, and have been on exhibition since the institution was opened in 1872. In the intervening years they have increased in size from 6 lb. to their present weight of from 60 lb. to 80 lb. The mackerel exist on a fish diet, evincing cannibalistic tendencies, relishing and thriving best on the remains of their slaughtered brethren. The young dog-fish, bred and hatched in the aquarium, are also cannibals, and their numbers are gradually reduced by their incorrigible propensities for eating each other.

Six quarts of the common earth-worm (*Lumbricus terrestris*) are supplied weekly. They serve as food for the sterlets, water-tortoises, barbel, and all the British fresh-water fishes with the exception of the pike (*Esox lucius*), who helps himself à discrétion when the inclination serves from among the roach, dace, and carp, his fellow-prisoners. Right well do they know when his dinner-hour approaches, crowding up into a corner of the tank, although at other times they will swim unconcernedly about him.

The lug-worm (*Arenicola piscatorium*) is much used for bait by the fisherman. They are obtained by digging in the sands of the sea-shore at low water, at a depth of from one to two feet. They derive their nutriment from the sand, and their presence is indicated by the "castings," or mounds of sand and mud, thrown up on the surface. Sixteen quarts, or 2,500 of these worms, are distributed every week in the aquarium tanks, among the king-crabs, weavers, gobies, rays, skate, soles, turbot, and all the flat fishes, which are, without exception, ground-feeders. It is very curious to watch the soles snapping up the worms from the bottom into their capacious, one-sided mouths. The young sturgeons partake of this diet when inhabiting salt water; but when shifted into fresh they feed on earth-worms, like the sterlets from the Volga.

The common shrimp (*Crangon vulgaris*) is a very important item in the dinner carte. No less than sixteen quarts, containing 35,500 shrimps, are re-

quired weekly. They serve as the exclusive food of the eledones and cuttles, surmullet, dragonets, boar-fish, and wrasse, and are also supplied, as an additional and much-relished dainty, to the majority of the marine fishes.

Six quarts of the tiny sand-hoppers (*Talitrus locusta*), collected from decaying sea-weeds thrown up by the tide, are needed every week. These minute crustaceans are very active, jumping long distances, and so exceedingly small that more than 22,000 are contained in every quart; yet they feed on animals even smaller than themselves! These expensive necessities are purchased for the support of the anemones, sea-horses, sand-smelts, pipe-fish, and herring, who dispose of over 132,000 among them weekly.

Three men are constantly employed in the collection of all these indispensable articles of food. In the aggregate—

720	quarts of live shrimps,
312	„ sand-hoppers,
720	„ lug-worms,
312	„ earth-worms,

are consumed annually, in addition to 65,790 dead fish, and the 20,000 live crabs already mentioned.

Thames worms are only an occasional item required to feed the salmon-fry. About twenty quarts are supplied yearly.

The foreign fresh-water fishes cannot obviously be furnished with the species of fish on which they respectively prey in the waters of their native rivers. In the absence of their natural food, however, they thrive on raw beef, cut up into small pieces, four pounds of which is furnished weekly for the lepidosiren, the Japanese salamander, and the electrical fishes, and finely-scraped portions supplemented with biscuit to the paradise and telescope fishes from China.

The lepidosiren, a native of West Africa, is capable of living out of water for several months, coiling itself up in a chamber of mud in the alluvial flats left dry by the retreat of the overflowing rivers. It can be observed to take its food in a very unusual manner, chewing it in a most leisurely fashion, then ejecting it from its mouth, and invariably subjecting it to a thrice-repeated process of mastication before finally swallowing it. The Rev. J. G. Wood states that some specimens at the Crystal Palace fed on frogs, and were also very destructive to the gold-fish sharing the same tank. The Brighton specimen is kept at the uniform temperature of 70°, and exists exclusively on raw beef.

Beef is also the support of the water-tortoises and the Mexican axolotls, but the greater portion is consumed by the electrical eels. The vital and digestive organs in these formidable fishes are restricted to that small section of the body lying immediately behind the head, and terminating at the commencement of the ventral fin, the whole of the remaining body of the animal being occupied by the powerful electrical organs. As a similar structure is characteristic of the African *Malapterurus*, and all the species of torpedo rays, it has been suggested that the electrical batteries compensate for the limited space occupied by the digestive organs; inasmuch as animal food destroyed by electricity is deprived of all organic irritability by the shock, and is therefore the more readily digested. In Guiana the eels feed on small fishes, which are first stupefied or killed by the shock, which acts fatally without coming into actual contact

with the animal destroyed; the electrical power, however, decreases with use, and an interval of rest is requisite to ensure its renewal. The specimens in this aquarium are capable of giving very severe shocks, as the force of their batteries is greatly intensified by nutriment and the repose enforced by their captivity.

In addition to the beef the butcher supplies 4 lb. of liver weekly for the sea-trout; this is a delicacy also much relished by the salamander and the bass.

There yet remains a variable number of fish requiring to be provided with live food—viz., the john doreys, and the angler or fishing-frog. Both of these genera are rarely seen in captivity; indeed, the angler is exhibited alive for the first time, and it must be admitted that the habits of this curious fish are now seen to great advantage. For some months after its arrival it was placed in a table tank affording a very good view of its extraordinary manoeuvres when endeavouring to capture its prey. It is a sluggish, slow-breathing ground-fish, and, like the octopods and soles, is able to assimilate its colour to the nature of its surroundings. When resting on shingle the dark spots are plainly visible; when on a sandy bottom it assumes a similar colourless appearance. Unable to capture living prey by swift pursuit, it resorts to cunning. Buried in the sand or shingle, the angler elevates the flexible fishing-rod lying out of sight when not in use, and waves the flag or bait affixed to the end in a most persuasive manner. The fish attracted within reach, it rises with a quick movement, and engulfs its victim within the capacious jaws. Closely-allied species were dredged during the Challenger Expedition from a depth of two miles from the surface, the bait in this instance being phosphorescent, and thus rendered visible to the fishes dwelling in those dark oceanic abysses. The captive specimen feeds on small gurnards, plaice, and herring, and is evidently an epicure, for it once refused food for a fortnight, and even when removed to a more spacious tank, it still fasted persistently until a fortunate catch of live herrings furnished fresh food for its dainty palate. A very few moments after their introduction to the tank the angler was observed industriously plying his rod, and apparently was soon successful, as the herrings were reduced in number an hour later. The john doreys are furnished with a shoal of live sprats, or sand-smelts, through which they eat their way *à discrétion*. It is rather a difficult matter to ensure a constant supply. The dorey is a stately, handsome fish, and pursues his fishing in a very cautious manner, erecting his dorsal spines, stretching out his prehensile mouth, and stalking his victims most warily.

Turf, eggs, bread, biscuit, canary, hemp, and rape seeds needed for the perching birds, and lastly flies, procured from the candle factories for the greentree-frogs, complete this long list of absolute necessities.

To meet the expenditure in the commissariat department the interest of a capital sum of nearly £18,000, invested at 5 per cent., is annually requisite.

A few words on the management of the tanks as affecting the life conditions of their inhabitants may not be inappropriate. The sea-water is pumped in from underground reservoirs capable of holding 500,000 gallons. This, at first somewhat turbid, is speedily purified and cleared by the operations of the oysters and mussels. The tanks are not often emptied, perhaps not even once in a year, but they

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are occasionally filled up with sea-water in order to repair the waste by atmospheric absorption. Each tank is isolated, and therefore completely independent of its neighbour, the proper circulation and aëration of the water depending upon a supply of compressed air, which is regulated by steam power. The remarkably low average death-rate among the acclimatized fishes of only one per thousand weekly is a sufficient testimony to the perfection of all these arrangements, while the continual increase among the lower forms of invertebrate life is even a surer indication that the difficulties attendant upon the control of such an enormous volume of water are most successfully overcome in the Brighton Aquarium.

A NIGHT WITH THE CABMEN.

NEWMAN STREET is unusually bright to-night; cab-lamps twinkle in a long line on each side of the way, and a blaze of gas in one of the dark rows of houses marks the entrance to the Cambridge Hall.

The seats in the body of the hall are nearly filled by members of the Cabdrivers' Benevolent Association, the objects of which are—first, to give annuities at the rate of £12 each to aged cabdrivers, or to those who from infirmity are unable to earn their living; secondly, to grant loans without interest to members requiring such aid, and to give temporary assistance to those who may be in distress through unavoidable causes; thirdly, to give legal assistance to members who may be unjustly summoned to the police-court. When cabby is thought of, it is too common to suppose that he must have a red nose and a generally "raffish" appearance. There is nothing of the kind to be seen here. The men, who no longer wear their badges, would, I think, be taken for small farmers by any one ignorant of their calling. Exercising providence for mutual benefit, they are, of course, the "cream of the profession." Here and there, in a circle leavened by a wag, a little good-natured chaff is going on, but for the most part the men sit still and silent; a few seem to be dropping off to sleep. Presently enters a beaming cab-and-committee-man, waving his hat and cheering as he ushers in the tall chairman of the meeting, Colonel Sir E. Henderson, K.C.B. Every hat goes off, mouths, hands, and feet join in applause when he makes his appearance.

The Chief Commissioner of Metropolitan Police is, of course, a divinity to be propitiated in cabmen's eyes; but, independently of this, they seem to be heartily grateful to him for the interest he takes in their welfare, and very proud that they can get a "reg'lar military swell" to come in evening dress "from some grand dinner somewhere" to preside over their meeting, bringing friends with him.

Thanks to the presence of six cabmen's wives in the gallery, Lord Richard Grosvenor, the treasurer, who moves the first resolution, is able to begin his speech with "Ladies and gentlemen," and to make a little joke about his pleasure in seeing before him not only drivers of cabs, but also the drivers of the drivers. The seconder of the resolution, one of the seven cabmen with whom the association originated, points with justifiable pride to the fact that it now numbers about a thousand members, and its capital

has increased from 8s. 9d. to more than £2,700! Cabby, he adds, who used to be looked down upon as dirt, now gets lords and gentlemen to come to his meetings, and, as a consequence, behaves much better than he used to behave. The speaker thinks, however, that it is disgraceful to cabmen, as a body, that the association should only number 1,000 benefit members to 770 outside subscribers. "If every cabman in London," he cries, "would pay his five shillings a year—not the price of a glass of 'old-six' a week—we could more than double our annuities."

The chairman's conversational address is a model of kindly, common-sensical advice, without preaching and without flattery. He makes the men laugh heartily when he calls himself a "buffer"—a buffer that ever and anon receives unpleasant shocks—set up to prevent collision between cabby and the public. He makes them stare when he tells them that about £3,500,000 pass annually through the hands of London cabmen. He cannot understand why London cabmen, being a stronger body than London policemen, cannot unite like the policemen to support an orphanage. He congratulates his audience on the recent striking diminution in the charges of drunkenness against cabmen; but, he adds, this may possibly be only the effect of bad times, since a similar diminution may be noticed in other classes. As to honesty, he says, cabmen must either have become wonderfully more upright or the public wonderfully more careless, for since the new regulations as to searching came into force thousands instead of hundreds of articles left in cabs have been brought to Scotland Yard.

The men are delighted when they hear that the police have been instructed not to be too eager to pounce upon crawling cabs. "A crawling cab may be a great blessing or a very great nuisance; it depends upon circumstances. But you must confess that to have thirteen in a row in Bond Street, as I have seen them myself, is rather trying; and a gentleman writes to the papers to say that he has counted forty-seven between Temple Bar and Charing Cross. As I said before, it is a vexed question. When Mr. Gladstone was Prime Minister, he complained to me that he had almost been knocked down by a crawling cab in St. James's Street. 'What am I to do, sir?' I replied; 'I had the honour of dining with four members of your Cabinet yesterday, and they all declared that they *would* have crawling cabs, whether I liked it or not!'"

The colonel's remarks on civility are worth quoting. "Be civil. You have no idea of the incalculable damage which one uncivil cabman does to the good name of the whole body. Of course, I know that the public is sometimes uncivil to you. It is even possible that a lady may be, say of the name of Rodgers"—a rhyming allusion greeted with roars of laughter—"but you will get no benefit from being uncivil in return."

The honorary secretary of the association next advocates the establishment of a relief fund for widows and orphans of deceased members. His plan is, first, that all benefit members contribute half-a-crown a year towards the fund; secondly, that the committee have the power to assist or refuse assistance from the fund according to the nature of the case presented to them; thirdly, that in no case shall the representatives of a subscribing member have the right to demand assistance.

The suggested subscription is too small to justify

such a demand; the subscriptions will have to be supplemented by contributions from the public to make the fund of any very appreciable utility, contributions which, on the principle that Heaven helps those who help themselves, will not fail, I think, to be forthcoming. Those readers of the "Leisure Hour" who are disposed and able to help may be assured that this is a good object for their beneficence.

The next speaker is a driver of a dogmatically didactic turn of mind. He lectures his "noble friend," as he calls the chairman, on his cab regulations, and his brethren on their love of beer. "Though I'm not a teetotaler myself," he parenthetically remarks. "Then you ought to be, and you'd have better right to talk," exclaim a score of voices. (Some thousand of London's ten or twelve thousand cabmen have taken the pledge.)

Afterwards the names of the three successful candidates for the annuities, polled for before the meeting, are announced. A glance at the list of the candidates or annuitants is sufficient to show how necessary such an institution has become. One man is mentioned as having been forty-one years a cabman, a second forty-three, a third fifty, a fourth even fifty-four years. Many others have served the public for long enough periods to entitle them to consideration; nor is this their only claim, many are disabled by disease, and either have families to support, or no relatives in a position to help them.

Varieties.

ADULTERATION.—The readers of the last annual report of the English Local Government Board will experience no surprise at the outcry against analysts and prosecutors which has been the theme of the druggists' trade journals ever since the passing of the Adulteration Act. In the metropolis in 1876-77 there were 4,177 samples of food, and 110 samples of drugs submitted for analysis. Of the former there were 615, or about one-eighth of the whole number examined, pronounced adulterated; but of the 110 samples of the latter examined only seven were found to be either more or less adulterated. In Manchester, sophistication appears to be practised to a serious extent; of 149 samples of food examined nearly one-half, or 63, were adulterated. In Liverpool, more than one-fourth, or 73, out of 210 samples of food were adulterated; of drugs, only three samples were analysed, but one of these was found adulterated. In Bristol, 58 samples of food out of 180 examined were adulterated. In Birmingham, of 67 samples of food and 25 of drugs, 25 of the former and 9 of the latter were adulterated. In Leeds, nearly one-fourth, or 21 out of 95 samples of food were found to be "unduly mixed" with foreign substances. Such an *exposé* as this, with which we may class the trade in "killed" seed lately exposed in the London police-courts, is an eloquent commentary on the honesty of our country, and it is useful because it relieves us of any scruple in enforcing the law against those guilty of adulteration frauds. It is evident that the law needs even greater stringency and greater firmness in its administration than now exists.—*Medical Press and Circular*.

BENSON'S LITERARY COMPETITORS.—Some curious letters were discovered in an old box belonging to the convict Kurr, which had been lying in a solicitor's office in London since the turf insurance swindle was exposed. It was stated at the trial of the detectives that Benson first made the acquaintance of Kurr through an advertisement, in which the latter made public his desire to meet with a person qualified to write an essay on any given subject. The answers were some hundreds in number, and the majority of these were from clerks in Government offices, this fact being explained by one of the applicants, who dates from the Board of Trade, when he says, "the official hours here are very short, and having a large amount of spare time on my hands, I should not limit myself to the time you

mention." The same young man says he has a great liking for essay writing, but that "my age (twenty) has hitherto been a great drawback to my obtaining a situation of this kind." Another applicant, writing from the War Office, says that, having corrected for the press, he has had considerable experience in literary composition. A third applicant says it would take "a lengthy *resumé*" in writing to say all he thought of his own qualifications for the post, and begs for an interview. Mr. —, of the Post Office, is an experienced prose and verse writer for the public press, etc., but does not explain what the etc. means. Mr. —, writing on paper belonging to the Principal Registry Office of the Court of Probate, puts forward as his qualification that he has written several prize enigmas and charades, and is disengaged at four o'clock; and another applicant says that, having been repeatedly correspondent of good periodicals, he has "gained the routine of moulding the occurrences of every-day life in the various shapes of the current taste." This last gentleman would not object to a "fair" trial of his capabilities. Most of the other letters are from City clerks, and their qualifications are best summed up in the words of one of them: "But I hope, by constant attention to business and perfect respectability, to justify my selection to the vacant situation." The *non sequitur* of the whole collection, however, is that of a man who writes, "I am a University man, and therefore well versed in general literature and science. I have a thorough knowledge of art, my pictures having been accepted at the Royal Academy. I have travelled a good deal, and therefore have a knowledge of the French language." Of all these applicants Benson was the one chosen.

GEOGRAPHY MADE EASY.—Some time ago the Lyons Geographical Society suggested an original means of vulgarising geographical knowledge. It proposed that the French railway companies should add to the names of their stations certain information of a geographical or statistical nature. A traveller passing along a line would thus learn something about the geographical position, the elevation above the sea level, the population, leading industries, and so on, of the towns he passed. This suggestion has already been acted upon by the Southern and Eastern Railway Companies. The same society has proposed that a geographical pillar—*pierre géographique*—should be erected in every commune throughout France. The idea has met with the approbation of the French Academy, and a model pillar is to be erected at Lyons. We remember having seen a similar structure at Frankfort-on-the-Maine, close to the Schiller statue. The information it supplied was of the most miscellaneous character. There were barometers, aneroids, thermometers, and other meteorological instruments; maps of the town and environs, the bearings and distances of the capitals of Europe, and the places of interest in the neighbourhood were given, as likewise information of special interest to visitors. This pillar, we understand, was set up by a local improvement society.—*Athenæum*.

SHROUD-MAKING.—Mr. Holman, of Sudbury, was the principal of a long-established firm, manufacturers of a fabric not, I believe, now in use—a thin, white, glazed woollen stuff, used only for shrouds. It was then required by Act of Parliament, as part of the protectionist system of the day, and to encourage the wool trade, that every one should be buried in wool. The manufacture, therefore, was considerable; and in Mr. Holman's factory not the material only, but the shrouds also were made. I vividly remember, on a dark winter's evening, stopping at a lone house between Milford and Sudbury, in which, under the care of some female relatives of Mr. Holman, the shroud-making was carried on. We were ushered into a large and lofty room, surrounded by smithy-like dressers or counters, on which, at full length, were laid out the shrouds in all their grim neatness of platings, stomachers, ruffles, and gimping, while others hung above on the walls. It was about as much as nerves could endure by candlelight. But here were residing three solitary sisters, apparently unconscious of any speciality in their employment. Of one of them, dying a few years after, I may relate a striking incident. They were all pious women, but one had fallen into a state of religious despondency, from which nothing availed to relieve her, and, to the distress of her family, she gradually declined to the grave under its influence. Dying, she made no sign, till at the last moment she suddenly exclaimed, "Glory! oh, this is glory!" and immediately expired, permitted, it seemed, in kindness to her sorrowing family, to antedate, but for an instant, Heaven itself. May it prove an encouragement to some suffering in a like darkness to hope on, "faint, yet pursuing," till through Him in whom in life they have trusted, they are in death made more than conquerors.—*Autobiography of Mrs. Gilbert (Anne Taylor)*.

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